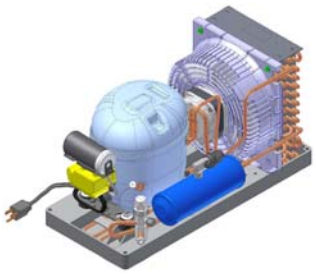
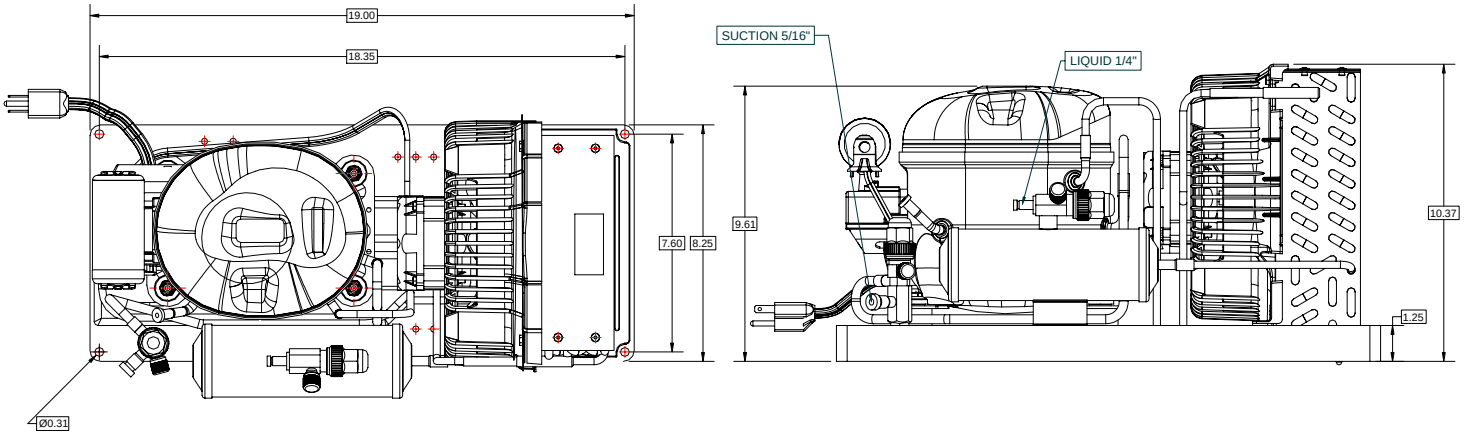
# TECUMSEH HERMETIC CONDENSING UNIT

| | |
|---|---|
| **Model** | **AE4430Z-FZ1AGL, GK, GB, GC** |
| **BOM** | **33Y476-2, -3, -4, -5** |
| **Air Cooled** | **1/4 HP** |
| **Application** | **High/Commercial Temp** |
| **Refrigerant** | **R 404A** |
| **Volts-Hz-Ph** | **220/240-50-1** |






| Model | Dimensions, inches (mm) | | | Line connections | | Pumpdown | Air flow | Oil Ch. | Gross wt. |
|---|---|---|---|---|---|---|---|---|---|
| | L | W | H | Suction | Liquid | 90% @90°F | CFM | Oz. | Lbs (kg) |
| **AE4430Z-FZ1AGL** | 19 (483) | 8.7 (221) | 10.3 (262) | 5/16" Sweat | 1/4" Sweat | n/a | 242 | 16 | 39.6 (18) |
| **AE4430Z-FZ1AGK** | | | | | | | | | |
| **AE4430Z-FZ1AGB** | | 9.7 (246) | | | | 1.53 | | | 40.2 (18.2) |
| **AE4430Z-FZ1AGC** | | | | 5/16" Valve Sweat | 1/4" Valve Sweat | 1.85 | | | 40.8 (18.5) |

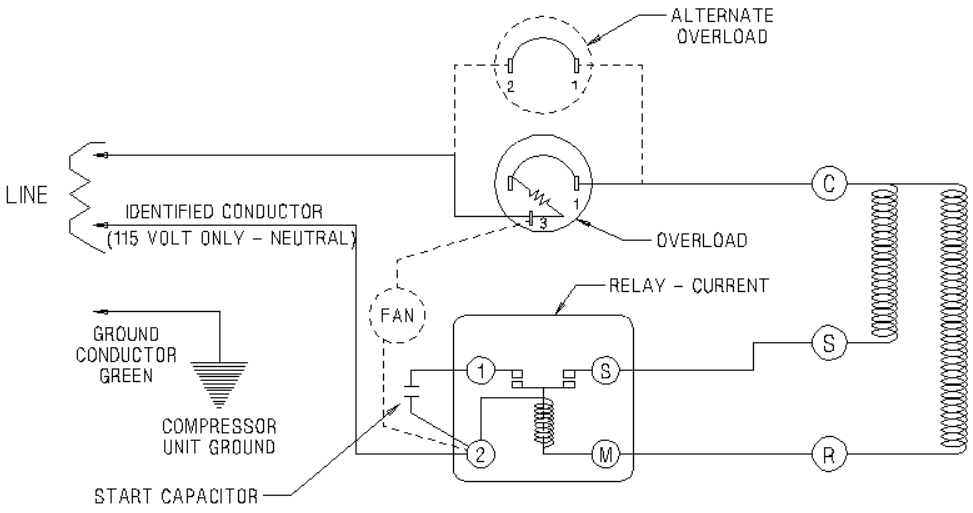
Factory charge 20 psig dry air, **MUST BE EVACUATED**

| Evaporator | | Ambient Temperatures | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 80°F | | | 90°F | | | 100°F | | | 110°F | | |
| °F | Psig | BTUH | Watts | Cond T | BTUH | Watts | Cond T | BTUH | Watts | Cond T | BTUH | Watts | Cond T |
| -10 | 23.9 | 840 | 220 | 94 | 740 | 220 | 103 | 650 | 220 | 112 | 570 | 230 | 121 |
| -5 | 28.2 | 940 | 230 | 96 | 830 | 240 | 105 | 730 | 240 | 114 | 640 | 240 | 123 |
| 0 | 32.8 | 1050 | 240 | 98 | 940 | 250 | 107 | 830 | 250 | 116 | 720 | 260 | 125 |
| 5 | 37.9 | 1180 | 260 | 101 | 1050 | 260 | 109 | 930 | 270 | 118 | 810 | 280 | 127 |
| 10 | 42.4 | 1310 | 270 | 103 | 1170 | 280 | 112 | 1040 | 290 | 120 | 910 | 290 | 129 |
| 15 | 48.2 | 1450 | 280 | 106 | 1300 | 290 | 114 | 1160 | 300 | 123 | 1010 | 310 | 131 |
| **20** | **54.5** | **1600** | **300** | **109** | **1430** | **310** | **117** | **1270** | **320** | **125** | **1120** | **330** | **133** |
| 25 | 61.2 | 1860 | 320 | 112 | 1680 | 330 | 120 | 1500 | 340 | 128 | 1330 | 360 | 136 |
| 30 | 68.4 | 2020 | 330 | 115 | 1830 | 350 | 123 | 1640 | 360 | 131 | 1450 | 370 | 139 |
| 35 | 76.1 | 2190 | 350 | 117 | 1970 | 360 | 125 | 1770 | 380 | 133 | 1560 | 390 | 141 |
| 40 | 84.4 | 2350 | 360 | 120 | 2120 | 380 | 128 | 1900 | 400 | 136 | 1670 | 410 | 143 |

Performance @ 60 Hz, Return gas 40°F below 20°F Evaporator and 65°F above 20°F evaporator, SubCooling 5°F

## Parts/Specifications

| | | | |
|---|---|---|---|
| **Unit BOM** | **33Y476-2** | Fan Motor | 810L006B95 |
| **Unit MODEL** | **AE4430Z-FZ1AGL** | Fan Motor RLA | 0.2 |
| | | Fan Blade | 4VEA009 |
| Refrigeration RANGE | 20°F to 55°F | Replacement Fan Motor | 6W230 |
| Design Pressure Low | 181 | F. M., blade, guard assy | YFBG-206 |
| Design Pressure High | 450 | F. M., blade, guard, shroud assy | |
| Volts - HZ - Ph | 220/240-50-1 | | |
| Voltage Range | 198 to 253 | Condenser | 50733-G04 |
| Min. Circuit Ampacity | 2.87 | Shroud | |
| Max. Fuse Size | 15 | Fan Guard | 116-003P |
| | | | |
| Compressor MODEL | AE4430Z-FZ1A | **Unit BOM** | **33Y476-3** |
| Compressor BOM | AE-1220-E | **Unit MODEL** | **AE4430Z-FZ1AGK** |
| Compressor LRA | 12 | Power Cord | 85259-3 |
| Compressor RLA | 2.14 | Unit Drawing | DGBU-062 |
| | | | |
| OverLoad | 830-10232 | **Unit BOM** | **33Y476-4** |
| Replacement Kit - O/L | | **Unit MODEL** | **AE4430Z-FZ1AGB** |
| Relay | 820-10169 | Receiver | 51085-1H |
| Replacement Kit - Relay | | Unit Drawing | DGBU-062R |
| Run Capacitor | | | |
| Run Capacitor Rating | | **Unit BOM** | **33Y476-5** |
| Start Capacitor | 85PS330D77 | **Unit MODEL** | **AE4430Z-FZ1AGC** |
| Start Capacitor Rating | 72-88 MFD 330V | Receiver w/Liquid Valve | 51085-1HV |
| | | Suction Valve | 56580-1 |
| Electrical Diagram | DEAE-10 | Unit Drawing | DGBU-062V |
| Unit Drawing | DGBU-062 | | |




115 OR 230 VOLT - SCHEMATIC WIRING DIAGRAM - CSIR

REF. DWG. MD472-1

WARNING - WIRING DIAGRAM MUST BE FOLLOWED AS SHOWN. ANY MISWIRING CAN CAUSE SERIOUS ELECTRICAL HAZARD AND POTENTIAL DAMAGE OR RUPTURE OF COMPONENT ELECTRICAL PARTS.

DEAE-10